

**A MEDIUM ACCESS CONTROL PROTOCOL FOR HIGH RATE
WIRELESS PERSONAL AREA NETWORK**

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ABSTRACT OF THE DISCLOSURE

10 The MAC protocol of the present invention takes into account backward compatibility and conventional layering principles while introducing QoS parameters to describe and transport the QoS traffic. Minislots are also introduced in the protocol in the context of slots to reduce the transmission time of management, control, and data frames, and to facilitate channel bandwidth allocation, in response to increasing PHY rates. A highly efficient piconet joining process for wireless devices (e.g., IEEE 802.15.3 devices, etc.) is also provided by the protocol.